A NEW APHODIUS AND A NEW GENUS AND SPECIES OF BUPRESTIDÆ FROM CALIFORNIA

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Aphodius davisi Fall, n. sp.

Small, oblong, moderately convex. Head piceous with paler margins; prothorax piceous, the lateral margins diffusely dull rufous; elytra yellow, checkered with subquadriform black spots; femora yellow, tibiæ and tarsi brownish; upper surface throughout polished and strongly shining.

Head anteriorly coarsely punctato-rugulose, closely punctate but smoother behind the frontal suture, which is perceptibly trituberculate; clypeal emargination distinct, limited each side by sharply defined subdentiform angulations which are not sinuate externally; genæ moderately prominent, rounded.

Prothorax three-tenths wider than long, only slightly narrower in front, sides feebly arcuate, hind angles well defined, somewhat obtuse; base arcuate, just perceptibly sinuate each side of the middle, marginal line very fine; disk sparsely finely punctate with still sparser intermixed much coarser punctures which, however, are somewhat more numerous at sides.

Elytra not quite as wide at base as prothorax, slightly widened posteriorly; striæ finely rather closely punctate; intervals nearly flat, finely sparsely punctate. The markings consist of three longitudinal series of alternating irregularly quadrate spots, each spot occupying the width of two interspaces. The first series is made up of three spots on intervals 2 and 3, the first spot subbasal; the next series of three on intervals 4 and 5 with first spot basal; the third series on intervals 6 and 7 has but two spots, these connected externally by a line on the eighth interval, which may extend forward to the humeral umbo and externally nearly to the margin.

Mesosternum not carinate between the coxæ; metasternum smooth and sparsely punctate medially, alutaceous and with coarser punctures at sides; abdomen alutaceous with a few fine punctures. Anterior tibiæ tridentate, crenulate above, smooth in front; hind tibiæ fringed at apex with unequal spinules; basal joint of hind tarsus not quite as long as the next three.

Length, 3.2 to 3.7 mm.; width, 1.55 to 1.9 mm.

Irvine Park, Orange County, California.

Described from ten examples sent me by Mr. A. C. Davis of Santa Ana, California, who with associates took them from

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the nests of wood rats (Neotoma). The type is one of the smaller examples and is probably a male, although I observe no positive sexual differences in the series at hand; it bears date "2-1-30."

When not darkened by alcohol or otherwise this is a very pretty little species with its black thorax and bright yellow sharply spotted elytra. A slight tendency toward variability in maculation is observed, which might become more marked in a longer series.

By Horn's Monograph *davisi* runs to *serval* in Group "I-d." It agrees nearly with *serval* in clypeal outline and sculpture of the head, and in a general way in coloration; *serval*, however, is a larger species, the elytral maculation quite different in detail, the pronotal punctuation much less disparate, the legs uniformly reddish brown, the tibial spurs distinctly sexually modified.

The type and two paratypes have been retained for my own collection; the remaining paratypes are returned to Mr. Davis, in whose honor the species is named in recognition of generous contributions to my cabinet and years of pleasant personal acquaintance in California.

Hesperorhipis Fall n. gen. (Buprestidæ)

Sixty-four years ago (December, 1866), Dr. Leconte erected the genus *Xenorhipis* for a unique male specimen of a small Buprestide having flabellate antennæ. It has been stated by Horn (1882) and later by Kerremans that there is no other known instance of this type of antennæ throughout the entire family; it will therefore be of more than ordinary interest to announce that there has come to me recently from California a unique male of another very small Buprestide having similarly flabellate antennæ. In general makeup this species shows a close relationship with *Xenorhipis*, but in several respects is not strictly congeneric and I would, therefore, suggest for it the above new generic title. The chief differences are indicated below in parallel columns and these, combined with certain characters in the specific description, will constitute a sufficiently distinctive diagnosis of the new genus.

XENORHIPIS

Antennal rami beginning at the second joint.

Last joint of maxillary palpus scarcely or feebly narrowed apically, the tip broadly truncate.

Elytra of normal length, the pygidium alone exposed.

Sides of metasternum with a large hairy depression or excavation.

Posterior coxal plates broad, scarcely narrowed externally.

Basal joint of hind tarsus but little shorter than the remaining joints taken together.

HESPERORHIPIS n. gen.

Antennal rami beginning at the third joint.

Last joint of maxillary palpus ovate conical, the apex pointed or at most very narrowly truncate.

Elytra shorter, the last five dorsal abdominal segments **ex**posed.

Sides of metasternum not at all excavated or depressed.

Posterior coxal plates triangular, the hind margin strongly oblique.

Basal joint of hind tarsus equal in length to the three following joints and constituting scarcely more than one-third the tarsal length.

Hesperorhipis albofasciatus Fall n. sp.

Very small, head, thorax and elytra of nearly equal width; length to tip of elytra 2.6 mm., to abdominal apex 3.25 mm., width of elytra at base barely 1 mm.

Color black, head and thorax with deep blue surface luster; elytra each with a transverse slightly oblique narrow parallel-sided white fascia just behind the middle, the two forming a very obtuse angle at the suture. Before the white fascia the elytra are of a brighter blue in a triangular area involving the entire width at base, the sides converging to the suture at the white fascia. Behind the fascia the elytra are black with barely detectable bronze luster. Body beneath black, faintly bluish; tibiæ and tarsi pallescent.

Antennæ (δ) dull testaceous, flabellate, almost precisely as in Horn's figure for *Xenorhipis* (Trans. Am. Ent. Soc., 1882, Pl. IV), except that the rami begin at the third joint.

Head almost as wide as the prothorax, front flatly convex, a vague longitudinal impression terminating above in a small vertical fovea; clypeus scarcely margined in front, very feebly so over the antennæ; surface densely, coarsely, shallowly reticulate. Eyes vertical, rather large but only moderately prominent.

Prothorax transversely quadrate, slightly more than one-third wider than long; sides parallel, a little rounded in front and just visibly sinuate posteriorly, hind angles sharply rectangular; base bisinuate; side margins fine, becoming subobsolete at the front angles; disk broadly flattened medially and with a slight trace of **a** postmedian transverse impression; sculpture same as on the head. Elytra very little wider than the thorax, seven-tenths longer than wide, feebly narrowed posteriorly; not very densely but rather roughly asperately punctate except in the white fascia, which is straight, perceptibly impressed, extends slightly forward from the suture to the side margin, and is without visible sculpture.

Body beneath closely punctate; prosternum vaguely impressed medially, intercoxal process as in *Xenorhipis*, long, gradually narrowed, apex acute, sides not at all angulate. Ventral segments throughout coarsely punctate, last segment deeply roundly emarginate. Tarsi as in *Xenorhipis*, the third and fourth joints with short membranous lobes; claws nearly simple, a feeble obtuse subbasal angulation.

The unique representative of this remarkable little species was beaten from mistletoe at Fort Tejon, California, VIII-3-30, by Mr. A. C. Davis, and was one of a box full of miscellaneous things sent me for identification. Mr. Davis writes me that he made strenuous efforts to obtain further specimens, but without success. The type remains in my collection.

Argyresthias Found in Golden Gate Park, San Francisco

There are four species of these small golden or silvery moths found in this locality, and their differences may be summed up in the following synopsis.

- A. Argyresthia pilatella Braun. Adult with 7-9 mm. wing expanse, dull silvery or grayish, a dark mark on the middle of the hind margin of the forewings; larva reddish, mining needles of *Pinus radiata* Don. from base; pupa in rough cocoon spun in contact with a needle or other substance.
- B. Argyresthia cupressella Wlshm. Adult with 7-9 mm. expanse, wings golden, head tuft white; larva yellow green, ochreous head, mining in tips of twigs of Cupressus macrocarpa Hartw.; pupa in rough cocoon spun in contact with two or more surfaces (among twigs).
- C. Argyresthia trifasciæ Braun. Adult with 6-8 mm. expanse, wings golden, head tuft brown; larva deep green, black head, pupa in smooth cocoon spun on one surface only (Larvæ collected from C. macrocarpa twigs).
- D. Argyresthia franciscella Busck. Adult with 8-9.5 mm. expanse, wings dull golden, almost smoky, and crossed by about three blackish lines, head tuft whitish; larva sordid brownish and found within terminal "cell" made of twigs of C. macrocarpa; pupa inside cell, no cocoon.—H. H. Keifer.